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SPECIAL

NATIONAL INTELLIGENCE ESTIMATE NUMBER 11-58

POSSIBLE SOVIET LONG RANGE BOMBER DEVELOPMENT, 1958-1962

(Advance Conclusions)

Submitted by the

DIRECTOR OF CENTRAL INTELLIGENCE

The following intelligence organizations participated in the preparation of this estimate: The Central Intelligence Agency and the intelligence organizations of the Departments of State, the Army, the Navy, the Air Force, and The Joint Staff.

Concurred in by the

INTELLIGENCE ADVISORY COMMITTEE

on 4 March 1958. Concurring were The Director of Intelligence and Research, Department of State; the Assistant Chief of Staff, Intelligence, Department of the Army; the Director of Naval Intelligence; the Assistant Chief of Staff, Intelligence, USAF; the Deputy Director for Intelligence, The Joint Staff; and the Atomic Energy Commission Representative to the IAC. The Assistant Director, Federal Bureau of Investigation, abstained, the subject being outside of his jurisdiction.

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CENTRAL INTELLIGENCE AGENCY

4 March 1958

SUBJECT: SNIE 11-58: POSSIBLE SOVIET LONG RANGE BOMBER DEVELOPMENT, 1958-1962*

THE PROBLEM

To estimate what new long range bomber types the USSR may develop for operational use over the next five years.

CONCLUSIONS

- 1. The USSR will probably introduce improved bombers into operational Long Range Aviation units during 1958-1962. Research and development toward improved manned bomber weapon systems is under way in the USSR, but the evidence of specific new long range bomber types is inconclusive.
- 2. During the period of this estimate, the USSR may introduce into operational units one or more of the following:
 - a. Improved versions of the BISON jet heavy bomber, having better range and altitude capabilities;

^{*} The title of this estimate, when used separately from the text, is classified CONFIDENTIAL.

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- b. A new subsonic heavy bomber, which could probably be available for operational use in 1959-1960, having performance characteristics somewhat better than those achievable by improving the BISON, especially with regard to range;
- c. A new medium bomber, which could probably be available by 1960-1961, having supersonic "dash" capabilities and a range roughly equivalent to that achievable in an improved BADGER.
- 3. The USSR probably has a continuing requirement for and is working toward aircraft capable of both supersonic speeds and two-way operations against all targets in the continental US. The achievement of both these characteristics would require advanced airframe design as well as high-energy chemical and/or nuclear propulsion. Chemically-powered aircraft with such characteristics will probably not be available for operational use in the USSR until after about 1962, although prototypes having significant propaganda impact may appear earlier. The attainment of a nuclear propulsion system for supersonic aircraft will

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require an extensive development and test program, probably extending well beyond 1962.

- 4. With a high-priority program, a reactor suitable for nuclear propulsion of subsonic aircraft could be available by 1962.*
- 5. We believe that the USSR has attached high priority to a space-flight program encompassing work on extremely high-altitude flight, manned earth satellites and manned space vehicles. It is probable that experimental manned rocket aircraft for extremely high-altitude research are now or soon will be flying in the USSR, but an operational hypersonic (over Mach 5) glide vehicle will probably not be achieved until some years after 1962.

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^{*} The Assistant Chief of Staff, Intelligence, USAF believes that this conclusion does not give due consideration to the possibility of accelerated Soviet developments in nuclear propulsion between new and 1962. In doing so, it does not give enough weight to a factor of particular concern to US security that the USSR, through determined efforts and concentration of resources, has proved that it is capable of unusual technological accomplishments, He believes, therefore, the paragraph should read as follows:

[&]quot;With a high priority program the Soviets may achieve a nuclear powered subsonic aircraft appreciably before 1962."